What is Mobile Integrated Healthcare-Community Paramedicine in Iowa?

Michael Van Niewaal – MercyOne Ambulance

Linda Frederiksen – MEDIC EMS

Terry Evans – Fort Dodge Fire/Rescue

Rebecca Curtiss – Bureau Chief of Emergency & Trauma Services

Overview and Goals of Presentation

- First Hour
  - Overview of Mobile Integrated Healthcare and Community Paramedicine
    - Nationally
    - In the state of Iowa
  - Introduction of EMSAC Mobile Integrated Health/Community Paramedicine Subcommittee Members
- Second Hour
  - Completion of any unfinished first hour material
  - Overview of two Iowa Community Paramedicine Delivery systems
  - Panel Discussion
  - Identify those attending who have an interest in initiating MIH/CP services in their community
  - Live Gap Analysis
    - YOUR questions and feedback about the needs and expectations of MIH/CP in Iowa
    - This final step in planning is vitally important to help us identify gaps and anything we may have missed!

Iowa EMSAC MIH-CP Subcommittee

- Michael Aguilar, JCAS
- LaDonna Crilly, WITCC
- Rebecca Curtiss, IDPH BETS
- Jacob Dodds, Henry County Healthcare
- Terry Evans, Ft. Dodge Fire
- Jerry Ewers, Muscatine Fire
- Linda Frederiksen, MEDIC EMS
- Jodi Hall, WDEMS
- Jeremy Hodges, Grape Community Hospital
- Steve Mercer, IDPH BETS
- Gary Merrill, Algona EMS
- Bruce Musgrave, Crawford County Memorial Hospital
- Jennifer Nutt, Iowa Hospital Association
- Linda Opheim
- Rob Paulus, EveryStep Hospice
- Mickey Sauser, Buena Vista Regional Center
- Terry Smith, IDPH BETS
- Eric Tigges, Clay County EMA
- Michael Van Niewaal, MercyOne Ambulance
- Dr. Richard Vermeer, Chair, Scott County Physicians' Advisory Board
- Robert Welte, Danbury Volunteer Ambulance/Siouxland Paramedics

Origins and Definitions of MIH/CP

- The term "Community Paramedicine" was first described in the U.S. in 2001, as a means of improving rural EMA and community healthcare
- Mobile Integrated Healthcare/Community Paramedicine provides healthcare using patient-centered, mobile resources in the out-of-hospital environment.
  - MIH is provided by many different healthcare practitioners and entities that link with EMS agencies either administratively or clinically, and
  - Community Paramedicine refers to those specific services provided by EMS Agencies and practitioners that link with other healthcare entities either administratively or clinically
- MIH/CP program patients are typically better served somewhere other than an emergency department
  - Laws in most states don't recognize transport to alternative destinations that could be of benefit to the patient
  - Right or wrong, EMS is driven by a transport model to provide sustaining revenue

The IHI Triple AIM

A Little History

National Level

- NHTSA *"EMS Agenda for the Future"*
- 2004 NHTSA Paper Published – Defined MIH/CP

  "An organized system of services, tailored to local need, which are provided by EMS personnel integrated into the local or regional healthcare system and overseen by both emergency ***and*** primary care physicians"
- 2008-10 Initiatives

State Level

- 2015 IDPH Bureau of EMS & Trauma Service actively involved with IEMSA
- Objectives/Goals
- Legislative Rules
- Toolkit

Why MIH/CP…… Why EMS?

- *EMS functions under a model of "Trained Providers" & "Direct Medical Supervision"*
- *By nature well versed in various medical conditions*
- *Adapt very well to our surroundings or any work conditions*
- *Understanding of those that use our 911 system*
- *Patient Protection and Affordable Care Act*
- *Public Relations & Marketing?*
- *https://youtu.be/dJPqHIqGxGU*

Drivers for MIH/CP

- Community Need Assessment
- Define “Target” Patients
  - Target #1 - Patient readmissions
  - Target #2 - Frequent Users of EMS & ED
  - Target #3 - Chronic Disease Management
  - Target #4 - Alternative Destinations
  - Target #5 - Home Health Support
- Data Collection
- Partnerships

How to assess your community

- CHNA
  - Done every 3 or so years, usually done in collaboration with the local hospitals and county public health
  - Several sections of needs. Find one that could be impacted by MIH-CP
    - Instant partners
- County Health Rankings
  - Government based body that counts all the social determinants on a predetermined list. Ranks it with the state average and nation best performers
- Local experts
  - Local hospital, PH, clinics, homeless shelters, soup kitchens, churches, etc.

Community assets

- This is a never ending search!
- Find the services available in your “region” that would be helpful for either a referral to or from.
  - This will be beneficial if you want to refer onto another service
  - Also a great source of training for your MIH-CP personnel
- Use all the above as “handshakes” needed to build and promote your MIH-CP.
- This is why MIH-CP is so versatile
  - Unique population+MIH-CP=Affordable/Sustainable community care

Show me the Data!

- County Health Rankings

Bureau of Emergency and Trauma Services

Regulatory Considerations

Regulatory Considerations

- Medical Director Engagement
- Scope of Practice
- Protocols
- Patient Care Report
- Communication/Notification to BETS

Medical Director Engagement

- EMS Provider may perform emergency and nonemergency medical care without contacting a supervising physician or physician designee if written protocols have been approved by the service program medical director which clearly identify when the protocols may be used in lieu of voice contact 641-132.2(3)
- The service program medical director may make changes to the department protocols provided the changes are within the EMS provider's scope of practice and within acceptable medical practice. A copy of the changes shall be filed with the department 641-132.8(3)*b*
- The medical director shall be responsible for providing appropriate medical direction and overall supervision of the medical aspects of the service program 132.9(1)

Scope of Practice

- Emergency medical care providers shall provide only those services and procedures as are authorized within the scope of practice for which they are certified 641-132.2 (4)

Protocols

- *"Protocols"* means written directions and orders, consistent with the department's standard of care, that are to be followed by an emergency medical care provider in emergency and nonemergency situations. Protocols must be approved by the service program's medical director and address the care of both adult and pediatric patients 641-132.1
- Service program operational requirements. Ambulance and nontransport service programs shall: Utilize department protocols as the standard of care. The service program medical director may make changes to the department protocols provided the changes are within the EMS provider's scope of practice and within acceptable medical practice. A copy of the changes shall be filed with the department 641-132.8(3)*b*
- All EMS service programs shall carry equipment and supplies in quantities as determined by the medical director and appropriate to the service program's level of care and available certified EMS personnel and as established in the service program's approved protocols 641-132.8(4)*b*

Patient Care Report

- *"Patient care report (PCR)"* means a computerized or written report that documents the assessment and management of the patient by the emergency care provider in the out-of-hospital setting 641-132.1
- Service program operational requirements. Ambulance and nontransport service programs shall: Complete and maintain a patient care report concerning the care provided to each patient 132.8(3)*a*
- The patient care report is a confidential document and shall be exempt from disclosure pursuant to Iowa Code subsection 22.7(2) and shall not be accessible to the general public 132.8(8)

Communication/Notification to BETS

- The Bureau of Emergency and Trauma Services supports the development and implementation of effective community-based healthcare teams such as Mobile Integrated Healthcare (MIH) systems that are comprised of multiple partners that help to decrease the burden on limited healthcare resources, saves healthcare dollars, and improves patient outcomes
- BETS appreciates notification that a service will be providing these non-traditional services
- BETS staff are always available to review protocols and answer any questions related to development and implementation of programs

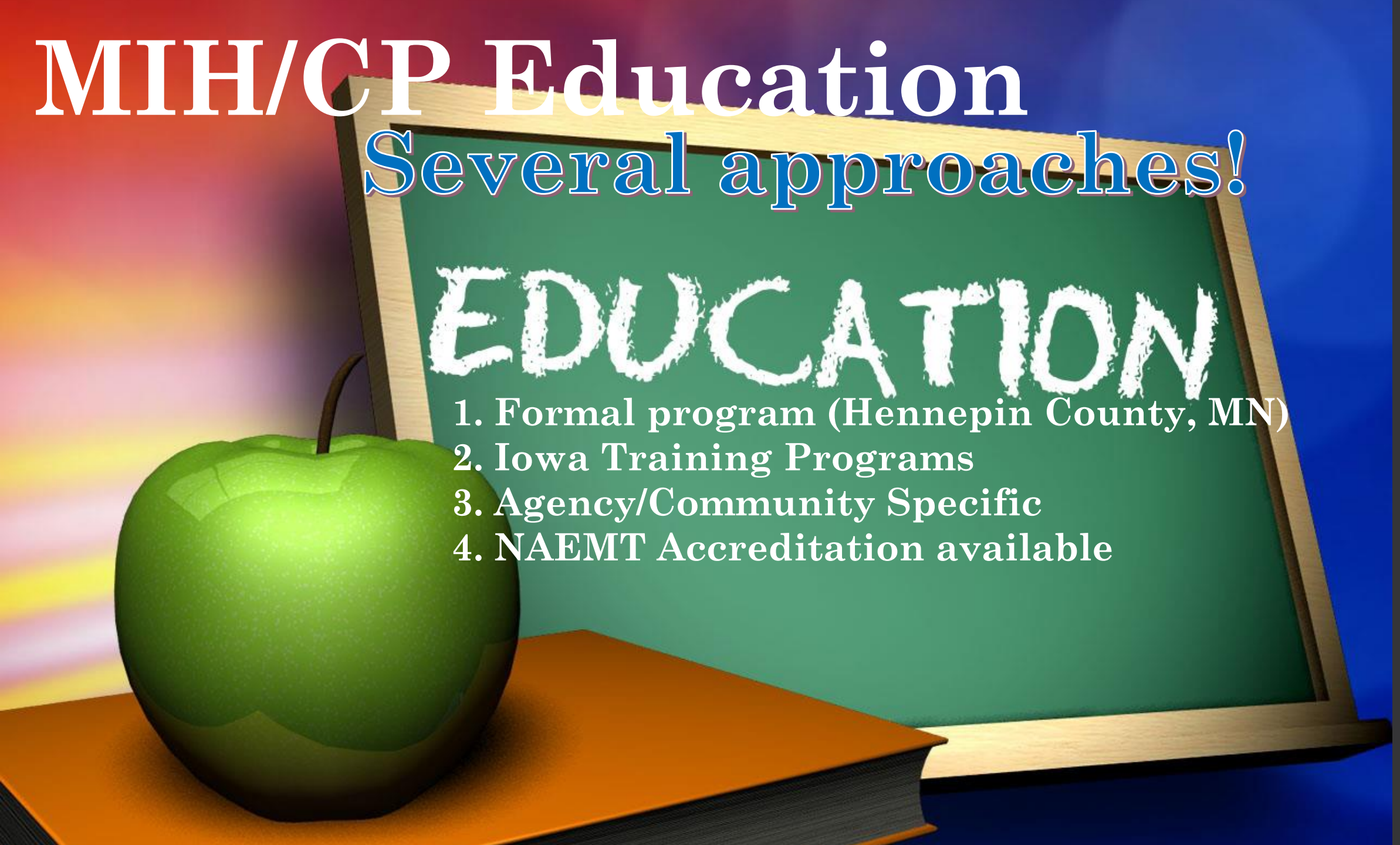
BETS Staff	Title	Office Number
Curtiss, Rebecca	Bureau Chief	242-5206
Barker, Jane	Bureau Administrative Assistant	281-5604
Baucum, Timothy	Warehouse Coordinator	443-1930
Carfrae, Alex	Preparedness Coordinator	745-4407
Catron, Kari	Fiscal/EMS Coordinator	242-6493
Clark, Travis	Compliance Officer	281-0601
Cook, Misty	Fiscal Coordinator-preparedness	725-4163
Dowd, Danny	Trauma Data Analyst	725-1204
Haack, Linda	EMS Administrative Assistant	281-0620
Hallman, John	Fiscal Coordinator-preparedness	281-4054
Heick, Cindy	Program Planner	281-0615
McComas, Margot	Trauma Nurse Coordinator	281-0443
Meese, Merrill	EMS Field Coordinator-TA	344-2793
Mercer, Steve	EMS Executive Officer	314-0867
Petersen, Vicki	EMS for Children Coordinator	229-6213
Shroyer, Matt	MCM Coordinator	322-8267
Smith, Marty	HAN and Communication Coordinator	664-9642
Smith, Terry	EMS Data Analyst	242-6075
Spear, Brent	Preparedness Executive Officer	229-5795
Stilley, Dave	EMS Medical Director	401-2330
Vandelune, Brad	EMS Field Coordinator	344-6101
Vannatta, Steve	EMS Field Coordinator	443-0911
Vitek, Chris	First Responder-Opioid Grant	499-3728
Webster, Natalie	Preparedness Coordinator	201-8733
Williams, Diane	Trauma and EMSC Executive Officer	822-8879

Other MIH/CP Launch Challenges

- Is additional education needed to provide MIH/CP?
- How does Medical Direction and Medical Control work?
- How is MIH/CP funded?

MIH/CP Education

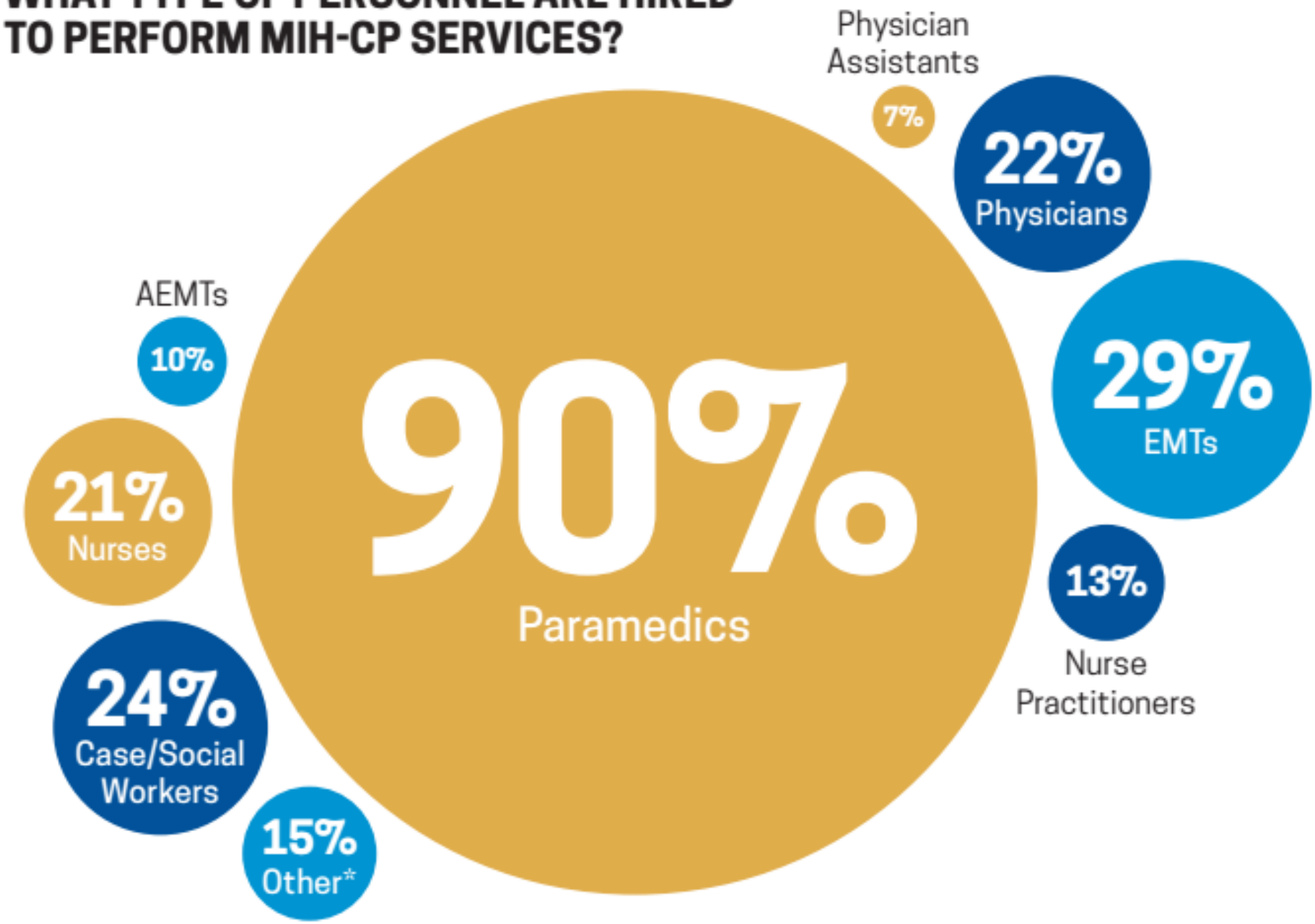
Several approaches!



1. Formal program (Hennepin County, MN)
2. Iowa Training Programs
3. Agency/Community Specific
4. NAEMT Accreditation available

STAFFING

WHAT TYPE OF PERSONNEL ARE HIRED TO PERFORM MIH-CP SERVICES?



Medical Director/Medical Control

Responsibilities are MANY, and include:

1. **Protocol development**
2. **Quality assurance**
3. **Immediate online medical direction (could be challenging for 24/7 programs)**
4. **Continuing education**
5. **Development and approval of care plans**
6. **Initial training**
7. **Healthcare system integration**

Who Pays for MIH/CP?

Has proven to be a real obstacle!

1. Taxpayers?
2. Grant funds
3. Legislative change that allows EMS to bill (Medicaid and Anthem BlueCross Blue Shield)
4. Contracts with Healthcare Partners (Hospitals, Homecare Agencies, Hospice)
5. Patients

CMS Emergency Triage, Treat and Transport (ET3) Model

- Voluntary 5 year payment model intended to provide greater flexibility for ambulance care teams to address the healthcare needs of Medicare beneficiaries following a 911 call. Under the model, Medicare will pay participating ambulance providers and suppliers to:

1. Transport an individual to an Emergency Department or other destination covered under the regulations;

2. Transport to an alternative destination (such as a primary care physician's office or Urgent Care Clinic);

3. Provide treatment in place with a qualified healthcare practitioner, either on the scene or connected via telehealth

4. Timeline
   - October 5, 2019-RFA due
   - Spring 2020-Program begins
   - December 2014-Program ends

Outcomes, Anyone?

MIH-CP PROGRAMS REPORT IMPROVED OUTCOMES FOR VARIOUS PATIENT GROUPS

	Highly Successful	Some Success	Little Success	No Success	Too Soon to Tell	N/A
Frequent 911 users	37%	32%	7%	1%	5%	18%
Congestive heart failure as a primary complaint/reason for referral	40%	25%	7%	0%	7%	20%
Substance abuse/alcoholism as a primary complaint/reason for referral	9%	25%	18%	1%	7%	39%
Other chronic diseases (COPD), diabetes, asthma	30%	44%	3%	0%	6%	17%
Terminal illness/hospice	15%	13%	6%	3%	6%	57%

MIH-CP PROGRAMS REPORT LOWERED COSTS FOR VARIOUS PATIENT GROUPS

	Highly Successful	Some Success	Little Success	No Success	Too Soon to Tell	N/A
Frequent 911 users	36%	31%	4%	2%	7%	20%
Congestive heart failure as a primary complaint/reason for referral	31%	33%	5%	0%	13%	18%
Substance abuse/alcoholism as a primary complaint/reason for referral	6%	26%	17%	3%	10%	39%
Other chronic diseases (COPD), diabetes, asthma	28%	41%	4%	0%	10%	17%
Terminal illness/hospice	15%	11%	8%	2%	9%	55%

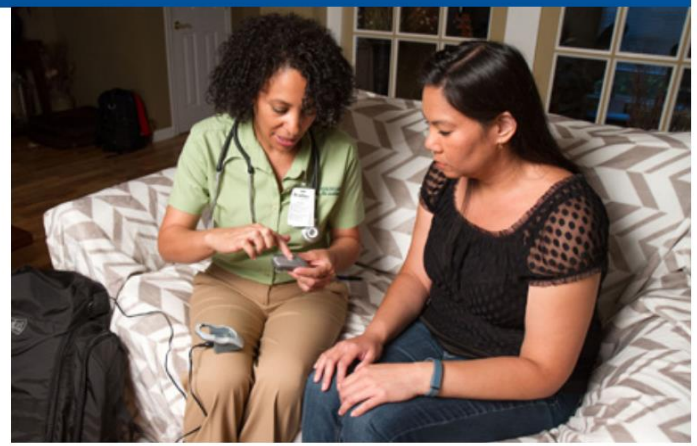
Measuring MIH-CP Success

At the time of the 2014 survey, there was almost no published data on patient outcomes, cost-effectiveness or the safety of MIH-CP programs. But over the last several years, this has changed.

Today, there are at least a dozen studies about MIH-CP published in peer-reviewed journals. In addition, individual MIH-CP programs or groups of programs have also shared patient outcome and cost data, which have been published as case studies in major EMS and healthcare trade and policy publications. Here are a few examples.

- An MIH care coordination program involving about 60,000 seniors enrolled in a managed Medicare Advantage PPO demonstrated a significant reduction in inpatient and ED utilization and costs, including a 40% decrease in inpatient utilization, a 37% decrease in inpatient costs, a 21% decrease in ED utilization and a 19% decrease in ED costs. The study was published in *Population Health Management* in 2017.[10]
- A study in *Prehospital Emergency Care* found that wait times were significantly shorter for patients taken by EMS directly to mental health facilities rather than EDs. The study involved 226 patients assessed by EMS in the field in Wake County, North Carolina.[11]
- Having paramedics visit seniors in low-income housing in Ontario, Canada to provide health education, make referrals to community resources, and reduce fall hazards resulted in a reduction in emergency calls, lowered blood pressure, and lowered diabetes risk after one year. The study was published in 2017 in *BMC Emergency Medicine*.[12]
- In California, published outcomes show that the state's MIH-CP pilot programs are proving to be safe and highly successful in reducing costs to Medicare and hospitals, and in improving patient well-being.[13]
- A study in the *American Journal of Emergency Medicine* that included 64 frequent ED users seen by MIH paramedics in Ft. Worth, Texas, found improvements in quality of life, reduced ED transports and reduced hospital admissions.[14]

With 88% of respondents agreeing that their programs are data-driven and that data is collected to measure the program's performance and success over time, more studies are sure to follow.



88%
agree that their program is data-driven and data is collected to measure the program's performance over time. (Only 4% disagree).

Takeaway: Tools for Measuring MIH-CP Programs Available

In 2015, leading EMS experts came together to determine what performance and outcomes measures MIH-CP programs could and should collect. With input from over 75 EMS and healthcare associations, the MIH-CP Measures Group published the core measures that EMS agencies operating MIH-CP can use to show value to partners, payers and the community. (The steering committee included Matt Zavadsky of MedStar Mobile HealthCare, Brenda Staffan of REMSA, Dan Swayze of the Center for Emergency Medicine of Western Pennsylvania, Brian LaCroix of Allina Health EMS, Gary Wingrove of Mayo Clinical Medical Transport and Dr. Brent Myers, former medical director of Wake County EMS.)

The measures strategy and workbook can be found under the "outcomes measures" category of the NAEMT MIH-CP Program Toolkit.

MEASUREMENTS USED TO DETERMINE MIH-CP IMPACT

80% Patient outcomes

79% Decrease in hospital re-admissions rate

75% Decrease in high frequency 911 callers

68% Customer experience surveys

66% Change in patient overall health status

30% Per patient episode cost

7% Other *(answers included reduction in falls %, savings to payer in ED visits, preventable admissions and out-of-network care)*


Time for
a BREAK